International Journal of Maxillofacial Prosthetics (iJMP)

REPORT

Tokyo 2nd edition of the international workshop for Young Maxillofacial Prosthetic Educators (yMPE): Building educators' skills and making impact

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Again in Tokyo, the second edition of the Young Maxillofacial Prosthetic Educators workshop took place and was held March 7-10, 2023 at the Tokyo Medical and Dental University (TMDU) (Fig. 1). It was hosted by the International Faculty Development Course (IFDC) and organized by the Maxillofacial Prosthetics team of TMDU. The workshop was supported by an education grant funded by the Education and Research Foundation of the International College of Prosthodontists (ICP) and sponsored by the International Journal of Maxillofacial Prosthetics (iJMP).

Objectives

Improve the teaching and presentation skills of young maxillofacial prosthetic educators through intensive lectures and presentations by highly experienced instructors.

Improve the clinical supervision for young educators through clinical observation of various maxillofacial defect cases and propose the effective prosthetic treatment for these cases.

Improve the publication and presentation skills for young educators through extensive lectures by editors of international leading prosthodontic journals.

Introduce up to date digital technologies that used in the education for maxillofacial prosthetics.

Instructors

Five instructors from the Maxillofacial Prosthetics team of TMDU were participated to perform the lectures and the clinical observation activities of the workshop. Dr. Mahmoud Elbashti, the founder and the chair of yMPE workshop. Dr. Yuka Sumita, Director of the Clinics for Maxillofacial Prosthetics. Dr. Mariko Hattori, assistant professors at the Department of Advanced Prosthodontics. Dr. Mai Murase and Dr. Mihoko Haraguchi from the clinics for maxillofacial prosthetics. In addition, three keynote speakers were invited. Prof. Noriyuki Wakabayashi, Executive Director, Executive Vice President of Education at TMDU. Prof. Tetsuya Yoda, the Dean of the Faculty of Dentistry at TMDU, and Dr. Jun Tsuruta, Educational System in Dentistry at TMDU.

Furthermore, six invited lectures were invited to cover some lectures and hands-on workshops within the program activities. Prof. Stephen Rosentiel, the editor-in-chief of the *Journal of Prosthetic Dentistry*. Prof. Radi Masri, the editor-in-chief of the *Journal of Prosthodontics*. Prof. Hiroshi Egusa, the editor-in-chief of the *Journal of Prosthodontic Research*. Prof. Harry Reintsema, Head Center for Special Dental Care/ Maxillofacial Prosthetics, Department of Oral Maxillofacial Surgery, University Medical Center Groningen, Netherlands. Prof. Takayuki Arai, a professor and the chair of the Department of Electrical and Electronics Engineering, Sophia University, Japan.

Fig 1. The 2nd international workshop for Young Maxillofacial Prosthetic Educators (yMPE) in Tokyo, Japan.

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Prof. Tomoki Itamiya, a professor of the Division of Dental Education, School of Dentistry, Kanagawa Dental University and the Director of XR Research Institute, Graduate School of Dentistry Kanagawa Dental University, Japan.

Participants

This workshop program was limited to 12 young maxillofacial prosthetic educators worldwide with 60% participation selection given for educators from developing countries. Candidates were early career academic staff attached to an educational institution that provides maxillofacial prosthetic education courses and clinical services for maxillofacial defect patients. Each candidate submitted an application form, a curriculum vitae (CV) and a letter of recommendation from his/her department head or school dean. A high level of English proficiency, in reading, listening, speaking and writing contexts, was also required.

Twelve educators were accepted for the 2nd yMPE workshop, 9 applicants were attended the workshop, while 3 applicants were unable to attend due to some unavoidable circumstances. Following is the list of educators' institutions and countries;

1- Walailak University, Thailand.
2- Guy's and St Thomas NHS Foundation Trust, UK
3- Tohoku University Hospital, Japan.
4- King George's Medical University, India
5- Complutense University of Madrid, Spain
6- All India Institute of Medical Sciences, India
7- Universiti Teknologi MARA, Malaysia.
8- National Taiwan University, Taiwan.
9- Institute of Dental Sciences, India.

The following expenses were supported by the workshop;
- Local transportation.
- 5 nights' accommodation.
- Lunch meals and coffee breaks during the workshop.

Workshop Program

In the morning session of the first day, a brief introduction about the workshop was presented and three lectures by keynote speakers were given for the educators followed by a 10-minute discussion for each lecture. Another lecture about maxillofacial prosthetic education program at TMDU was given to the educators. These lectures focused on educational aspects (Figs 2-5).

In the afternoon session, the clinical observation was performed at the Clinics for Maxillofacial Prosthetics of TMDU Hospital. Educators were divided into 3 groups. Each group was introduced to the clinic facilities and observed various maxillofacial defect cases and their prosthetic rehabilitation (Figs 6, 7). Those cases include Maxillectomy, Mandibulectomy, Glossectomy, cleft lip and palate cases, facial defect cases. The medical and dental history for those cases were reviewed and the prosthetic treatment for each case was discussed with educators. At the end of the day, all educators went to visit the multi-floor showcase room of GC Corporation. They spent about an hour observing the latest dental products, innovative dental equipment, and unique dental units. Educators got a brief explanation about the history of the company and the development of its products.

Fig 2. A brief introduction about the workshop sessions.

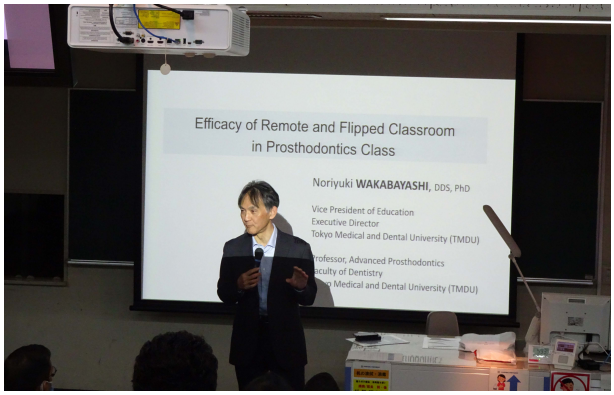
Efficacy of Remote and Flipped Classroom
in Prosthodontics Class
Noriyuki WAKABAYASHI, DDS, PhD
Vice President of Education
Executive Director
Tokyo Medical and Dental University (TMDU)

Fig 3. A lecture by keynote speaker about the efficancy of remote and flipped classroom in prosthodontics class.

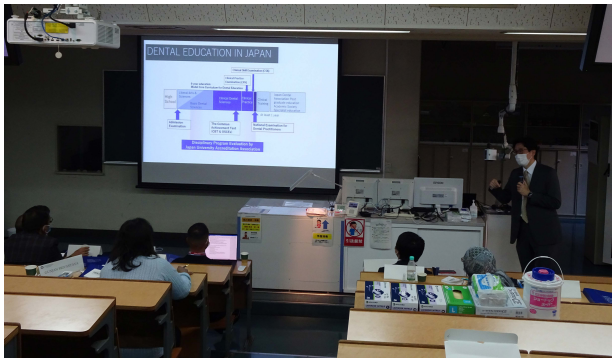

Fig 4. A lecture by keynote speaker about the dental education systems at TMDU and in Japan.

Today's contents
1. TMDU vision and education.
2. The education of maxillofacial prosthetics.
① Student & General Dentist
② Prosthodontist
③ Maxillofacial prosthodontist
④ Surgeon, Dental technician, Dental hygienist.

Fig 5. A lecture about the maxillofacial prosthetic education at TMDU.

Fig 6. Introduction to the clinical observation sessions.

Fig 7. Clinical observation session.

On the second day, clinical observation continued in the morning session at the Clinic for Maxillofacial Prosthetics. Educators continued to observe various maxillofacial defect cases and their prosthetic rehabilitation.

In the afternoon session, another two lectures were given for the educators followed by a 10-minute discussion for each lecture. The first lecture was about the experience on XR devices in dental education (Fig 8, 9). The second lecture was about the Maxillofacial Prosthetics Education Program at the University Medical Center Groningen, Netherlands. Those lectures covered various maxillofacial prosthetic topics and focused more on the educational aspects of maxillofacial prosthetics (Fig 10). A hands-on workshop on Sony Display technology by Sony Corporation was preformed (Fig 11). At the end of the day, all educators went to a unique café where their faces were printed on drinkable coffee!

Fig 8. A hands-on about the experience on XR devices in dental education.

Fig 9. A hands-on about the experience on XR devices in dental education.

Fig 10. A lecture about the maxillofacial prosthetics education program at the University Medical Center Groningen, Netherlands.

Fig 11. A hands-on workshop on Sony Display technology by Sony Corporation.

In the morning session of the third day, three lectures on prosthodontic journals publications were given by the editor-in-chief of the three leading international peer-reviewed prosthodontic journals; *Journal of Prosthetic Dentistry*, *Journal of Prosthodontics*, and the *Journal of Prosthodontic Research*. The aim of this workshop session was to improve the publication skills of the educators. (Fig 12).

Fig 12. Three lectures presented by the editor-in-chiefs of the three leading international prosthodontic journals.

In the afternoon session, a lecture and hands-on various acoustic production and evaluation were performed (Figs 13, 14). Various physical models for sound production including vowels and consonants were used. Educators had the practical experience to produce these sounds and use these techniques for teaching their students.

Fig 13. A lecture on various acoustic production and evaluation.

Fig 14. A hands-on various acoustic production and evaluation.

Fig 15. Hands-on session.

In the morning session of the forth day, a lecture and hands-on the naked eye stereoscopic technology for maxillofacial prosthetics were performed (Figs 16-18). Sony display technology was used in this session.

Fig 16. A lecture on naked eye stereoscopic technology for maxillofacial prosthetics.

Fig 17. A hands-on naked eye stereoscopic technology for maxillofacial prosthetics.

Fig 18. A hands-on mixed reality applications.

In the afternoon session, clinical case presentations by all educators were performed (Figs 19, 20). Each educator was asked in advance to prepare a maxillofacial prosthetic case that was treated by the educator. Educators were divided into three teams. Each team presented its cases and one clinical case was chosen to be written as a case report article and published in the international journal of Maxillofacial Prosthetics. Overall, three cases were chosen for publication as case reports.

The overall workshop activities were reviewed and discussed with the educators, the future collaboration and directions were also discussed. A closing remarks speech was given by the author highlighting the success of the activities and the great contribution of the educators and instructors. Certificates of attendance were awarded and delivered to all participants for their active contribution (Fig 21).

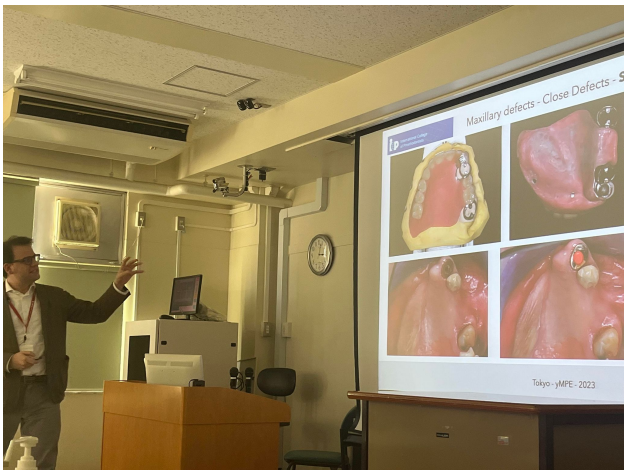

Fig 19. Clinical case presentations by educators.

Fig 20. Clinical case presentations by educators.

Outcomes

The teaching and presentation skills of young maxillofacial prosthetic educators were developed and improved through intensive lectures and presentations that were given by highly experienced instructors in the field of maxillofacial prosthetics. This workshop gave the participants the opportunity to learn how to establish and develop a maxillofacial prosthetic program. Prof. Reintsema has given his experience regarding the establishment and develop a maxillofacial prosthetic program within the university and hospital-based environment. Dr. Sumita has also given her experience in this regard as she is managing a unique maxillofacial prosthetics program at TMDU.

The clinical supervision skills for young educators were also developed and improved through clinical observation and discussion of various maxillofacial defect cases. Educators were able to propose effective prosthetic treatments for those kinds of cases. Also, educators learned various clinical techniques that related to radiotherapy appliances that need to be prepared by the maxillofacial prosthodontists which usually are not common in their institutions.

In addition, the publication skills for young educators were developed and improved through intensive lectures given by the editor-in-chief of the leading prosthodontics journals. Through these activities, educators were able to learn the necessary skills that help them to publish their research work in highly recognized prosthodontics journals. Educators were able to work within teams to present the clinical cases that they were treated at their institution. Each team discussed their cases and chose the best case to be published in the International Journal of Maxillofacial Prosthetics. In addition, all educators have agreed to collaborate together to perform future research projects within multi-institution projects.

Furthermore, educators were introduced to up-to-date digital technologies that are used in education, research activities, and clinical applications for maxillofacial prosthetics through the hands-on digital technology workshops. Besides the physical speech production models, educators have used digital acoustic analysis techniques to evaluate the produced speech. They were able to discuss many aspects of those techniques with the instructors and the possibility to apply them in their institutions for clinical applications and teaching purposes. The digitized 3D data resources for those physical models were also given to all educators. So educators can simply download them from the given link and then print them using a 3D printer and use them to teach their students. The other aspect of digital technology application is that the educators were able to use the latest technologies that help them to visualize 3D data using both XR devices in dental education and the naked eye Sony display technology.

Fig 21. A group picture for the educators and instructors at the 2nd yMPE workshop.